

POLEVITSKIY, K.A.

KARPENKO, Aleksandr Nikolayevich, akademik, professor; POLEVITSKIY, Konstantin Aleksandrovich, professor; PESTRYAKOVA, S.V., redaktor; BALLOD, A.I., tekhnicheskiy redaktor

[Agricultural machines and implements] Sel'skokhoziaistvennye mashiny i orudija. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956.
527 p. (MIRA 10;3)

1. Moskovskaya Ordena Lenina sel'skokhozyaystvennaya akademiya im. K.A.Timiryazeva (for Karpenko). 2. Leningradskiy sel'skokhozyaystvennyy institut (for Polevitskiy)
(Agricultural machinery)

KARPENKO, Aleksandr Nikolayevich, akademik; POLEVITSKIY, Konstantin
Aleksandrovich, prof.; LETNEV, B.Ya., red.; PROKOP'YEVA, L.N.,
tekhn.red.

[Agricultural machinery and tools] Sel'skokhoziaistvennye mashiny
i orudiia. Izd.4., perer. i dop. Moskva, Gos.izd-vo sel'khoz.
lit-ry, 1960. 469 p. (MIRA 14:1)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (for Karpenko).

(Agricultural machinery)

POLEVITSKIY, Konstantin Aleksandrovich, prof.; IOFINOVA, M.A., red.; CHAPSKIY, O.U., red.; CHUNAYEVA, Z.V., tekhn. red.; BARANOVA, L.G., tekhn. red.

[Agricultural machinery and implements] Sel'skokhoziaistvennye mashiny i orudija. 4., perer. izd. Leningrad, Sel'khozgiz, 1960. 647 p.
(MIRA 15:8)
(Agricultural machinery) (Agricultural implements)

POLEVITSKIY, K.A., doktor sel'skokhoz.nauk; POLEVITSKIY, K.K., kand.tehn.--
nauk

Photoelectric system for checkrow planting. Mekh. i elek. sots.
sel'khoz. 20 no.1:33-36 '62. (MIRA 15:2)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Planters (Agricultural machinery))

POLEVITSKIY, K.A., prof., doktor sel'skokhozyaystvennykh nauk

"Academician V.P. Goriachkin; a biographical account" by
A.A. Dubrovskii. Reviewed by K.A. Polevitskii. Mekh. i elek.
sots. sel'khoz. 19 no.6:62 '61. (MIRA 14:12)
(Goriachkin, Vasili Prokhorovich)
(Technology) (Dubrovskii, A.A.)

POLEVITSKIY, K.A., doktor sel'skokhoz.nauk; POLEVITSKIY, K.K., kand.tekhn.--
nauk

Photoelectric system for checkrow planting. Mekh. i elek. sots.
sel'khoz. 20 no.1:33-36 '62. (MIRA 15:2)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Planters (Agricultural machinery))

L 21699-66 EWT(1) RO

ACC NR: AP6015823

(A, N)

SOURCE CODE: UR/0346/65/000/007/0070/0071

AUTHOR: Poloz, D. D. (Candidate of veterinary sciences); Poletskiy, V. A. (Candidate of biological sciences); Sokolov, V. P. (Scientific worker) 37
35ORG: All-Union Institute of Experimental Veterinary Medicine (Vsesoyuznyy institut eksperimental'noy veterinarii) BTITLE: Prophylaxis and diagnosis of the poisoning of bees by organophosphorus toxic chemicals 6

SOURCE: Veterinariya, no. 7, 1965, 70-71

TOPIC TAGS: insecticide, poison, toxicology, organic phosphorus compound, plant reproduction, commercial animal, horticulture

ABSTRACT: Poisoning of bees by organophosphorus compounds may occur as a result of the spraying or dusting of different nectariferous plants during their flowering period in cases where beekeepers are not advised in advance of such spraying or dusting; use of bees to pollinate vegetable crops (cucumbers, etc.) on plantations and in hothouses during the first few days following treatment of the crop with contact organophosphorus chemicals (thiophos, dithiophos, carbophos, metaphos, chlorophos, etc.); following treatment of various crops with systemic organophosphorus chemicals (mercaptophos, methylmercaptophos, octamethyl, phosphamide, etc.); and on mass treatment of the skin of animals in the neighborhood of apiaries (which causes contamination of nectariferous plants). Plants dusted or sprayed with such chemicals remain toxic to bees over different periods: in the case of contact

Card 1/2 UDC: 619:615.9.616.7.084:638.12 Z-

L 24699-66

ACC NR: AP6015823

2

chemicals, the danger of poisoning to bees persists for 3-5 days, and for systemic chemicals, as long as six months. Organophosphorus compounds have a neuromuscular effect based on selective depression of cholinesterase. On entering the bee organism, they disturb the functions of the central nervous system, leading to the mass death and maiming of bees, as well as to contamination of their honey with consequent danger to human health. Hence, in all cases of the mass poisoning of bees, the honey must be tested for such contamination. In this connection, the author describes an effective biochemical stain test, in which, if the organophosphorus poison is present, the cholinesterase enzyme is suppressed so that the acetylcholine added to the mixture is not dissociated and does not change the blue color of the indicator (bromothymol blue). There also exists a biological test, based on the subcutaneous injection of alcohol-water extracts of the investigated material into chicks or white mice. As for the measures to prevent the poisoning of bees by organophosphorus ~~pesticides and insecticides~~, these should be as follows: treatment of crops prior to their flowering period; confinement of bees to their hives for the first 3-5 days following treatment of crops with contact chemicals; transfer of bee hives to another site 5-10 km from the site of crop treatment, if systemic chemicals are used; periodic testing of nectariferous plants for contamination by organophosphorus compounds; testing of honey and honeycombs for contamination by organophosphorus compounds in all cases of mass and sudden death of bees, in order to decide whether the honey is safe for human consumption. Orig. art. has: 1 table. [JPRS]

SUB CODE: 06, 02 / SUBM DATE: none

Card 2/2 F/W

POLEVODA, G.; KRUTYPOROKH, F., kand.sel'skokhoz.nauk; FEDOROV, N.; VOLODIN, I.

Letters to the editor. Sel'.stroi. 15 no.9:30 S '60.

(MIRA 13:9)

1. Direktor Udmurtskoy shkoly stroitel'nykh masterov (*desyatnikov*)
(for Polevoda).
2. Direktor Penzenskogo lespromkhoza (for Fedorov).
3. Sekretar' partorganizatsii Penzenskogo lespromkhoza (for Volodin).

(Building)

LEPIKHOV, V.M.; POLEVODIN, Ye.I.

Automation of drainage systems with low voltage electric motors.
Ugol' Ukr. 5 no.7:34-36 Jl '61. (MIRA 15:1)

1. Glavnnyy energetik tresta Kirovugol' Luganskogo ekonomicheskogo
rayona (for Lepikhov). 2. Zamestitel' glavnogo inzhenera shakhty
"Novo-Pavlovskaya" tresta Krasnoluchugol' (for Polevodin).
(Mine drainage) (~~A~~utomatic control)

KUZNETSOV, I.S.; POLEVODIN, Ye.I.

Highly mechanized mine. Ugol' 36 no.8:5 Ag '61. (MIRA 14:9)

1. Nachal'nik zhakhty "Novo-Pavlovskaya" kombinata Donbassantratsit",
Luganskiy sovnarkhoz (for Kuznetsov). 2. Zamestitel' glavnogo
inzhenera shakhty "Novo-Pavlovskaya" kombinata Donbassantratsit
(Luganskiy sovnarkhoz) (for Polevodin).
(Donets Basin--Coal mines and mining)

POLEVODOV, A.P.; DANILIN, V.I.; KRASIL'NIKOV, B.G.; VLASOV, L.G.

Press for determining the volume electric resistance of powders
at various pressures. Zav. lab. 31 no.11:1417-1418 '65.

(MIRA 19:1)

AUTHORS: Polyvodov, A. P., Nikashina, V. A., Gordiyevskiy, A. V.,
Senyavin, M. M., Breger, A. Kh. SOV/156-58-4-39/49

TITLE: The Radio-Chemical Stability of the Ion Exchange Resins Under
the Influence of γ - and β -Rays on the Cationites (Radiatsionno-
khimicheskaya ustoychivost' ionoobmennyykh smol. Deystviye γ - i
 β -izlucheniya na kationity)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya
tekhnologiya, 1958, Nr 4, pp 761-764 (USSR)

ABSTRACT: The radio-chemical stability of the cationites KU-2, KU-1, SBS,
RF, KB-4 under the influence of γ - and β -rays was investigated.
Cobalt ⁶⁰ was used as γ -radiiator. In the irradiation the capacity
of the cationites is reduced. The chemical stability is reduced
by the irradiation and the capability of swelling of the resins
KU-2 and KB-4 decreases, whereas it increases with the resins
KU-1 and RF. The quantity of the functional group of the
cationites becomes smaller with increasing activity. The ion
exchangers of aromatic structure are more stable than resins of
aliphatic structure. γ - and β -irradiation has the same influence

Card 1/2

The Radio-Chemical Stability of the Ion Exchange Resins Under the Influence
of γ - and β -Rays on the Cationites

SOV/156-58-4-39/49

on the cationites. The irradiation of cationites in air under
the influence of γ -rays causes deeper destructive changes in
the cationites. There are 1 figure, 2 tables, and 3 Soviet
references.

ASSOCIATION: Kafedra tekhnologii radioaktivnykh, redkikh i rasseyannykh
elementov Moskovskogo khimiko-tehnologicheskogo instituta im.
D. I. Mendeleyeva (Chair of Technology of the Radioactive, Rare
and Trace Elements at the Moscow Chemical and Technological
Institute imeni D. I. Mendeleyev)

SUBMITTED: March 24, 1958

Card 2/2

RUSINOV, A.; POLEVODOVA, L.F.

Letters to the editor. Zhur. nevr. i psikh. 61 no.11:1756-1757 '61.
(MIRA 15:2)
(NEUROPSYCHIATRY)

~~POLEVODA, N.P., fel'dsher (g.Petrodvorets Leningradskoy oblasti)~~

Our work in the control of colds in school. Fel'd. i akush. 21
no.5:22-23 My '56. (MLRA 9:8)
(COLD (DISEASE)) (SCHOOL HYGIENE)

POLEVOJ, B.

"Performance of members of the League for Cooperation with the Army was one of the best." p. 455.

SVET MOTORU. (Svaz pro spolupraci s armadou). Praha, Czechoslovakia, Vol. 9, No. 15, July 1955.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

SOV/32-24-7-4/65

AUTHOR:

Polevoy, A. I.

TITLE:

A Stand for the Determination of Gases in Metals by Means
of the Spectral Method (Shtativ dlya opredeleniya gazov v
metallakh spektral'nym metodom)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Nr 7, pp. 884-885 (USSR)

ABSTRACT:

The determinations mentioned above are carried out by means of special stands in which the electrodes are isolated by a vacuum top from the outer atmosphere. The stand can, however, be used for one analysis only, without another installation of the top. In the present paper the author describes a stand which makes it possible to analyse four samples without changing the top. From the diagram and the figures, as well as the description given may be seen that an electric magnet armature is located in an electro-magnetic coil; it is connected with a little four-toothed wheel. When current is passing through the coil the armature is pulled down, the corresponding tooth of the little wheel is freed and the wheel begins to rotate; together with the little wheel also the samples begin to rotate. By the rotation of the little wheel the current is, however, disconnected again and the next tooth

Card 1/2

A Stand for the Determination of Gases
in Metals by Means of the Spectral Method

SOV/32-24-7-44/65

of the wheel arrests the armature in a definite position. The use of this stand in steel analyses for determining the nitrogen and oxygen content showed that the stand makes possible a convenient and continuous work. I.I. Chudin took part in the design of the stand.
There are 3 figures and 1 reference, which is Soviet.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod im. Stalina (Stalino Metallurgical Works imeni Stalin)

Card 2/2

POLEVOI, A. P.

Ob eksplotatsii planirovani morskogo flota. /
merchant marine/. (Vodnyi transport, 1935, no. 2, p. 21).
DLC: HE561.R8

SO: Soviet Transportation and Communications, Library of Congress,
Reference Department, Washington, 1952, Unclassified.

POLFVCI, A. P.

Kontrol'nye tsifry 1935 g. (Morskoi transport). *[Preliminary figures for sea transportation in 1935.]* (Vodnyi transport, 1934, no. 11, p. 6-8, tables).

DLC: HE561.R8

SO: Soviet Transportation and Communications, Library of Congress,
Reference Department, Washington, 1952, Unclassified.

Y
POLEVOI, A. P.

¹togi vypolneniya plana morskikh perevozok v 1936 g. [The results of ful-
filment of the sea shipping plan in 1936]. (Vodnyi transport 1937, no. 3. i. 9-11).
DLC: HE561.R8

Plan morskoi navigatsii 1937 g. [Sea navigation plan for 1937]. (Vodnyi transport,
1937, no. 4. p. 14-16). DLC: HR561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
Reference Department, Washington, 1952, Unclassified.

POLEVOY, A.

PA 30T84

~~ships~~/ships
Cotton
Barges

Jan 1946

"Direct Nonportage Transportation of Cotton by Water,"
A. Polevoy, Engr, 3 pp

"Morskoy Flot" No 1

Treatment of the problem of transporting cotton from Central Asia to the textile factories of the European part of the USSR. The question arose as to whether separate cotton barges for river transportation and for sea transportation should be constructed, or a special type of barge that would serve to transport cotton from Krasnovodsk directly to the Upper Volga without reloading the cargo onto another vessel,
~~etc~~

30T84

POLEVY, A.

Growth in labor productivity is the most important condition for the
development of a merchant marine. Block agit.vod.transp. no.14:8-17
J1 '56. (Merchant marine) (MIRA 9:9)

POLEVOY, A.

Regulation of work shifts in ports. Mor.flot.16 no.8:6-3 Ag '56.
(MIRA 9:10)

1.Zamestitel' nachal'nika Otdela truda i zarplaty Ministerstva
Morskogo flota.
(Harbers) (Cargo handling)

POLFVOY

Use all possible means for the increase of labor productivity in the
merchant marine. Blok. agit. vod. transp. no.4:8-17 F '57.
(Merchant marine) (MLRA 10:4)

POLEROV, Aleksey Pavlovich; SHAPIRO, A.I., red.; VOINOV, A.A., red. izd-va;
LAVRENOVA, N.B., tekhn. red.

[Volume and weight of cargo transported by water] Ob'em i ves gruzov
perevozimykh morem. Moskva, Izd-vo "Morskoi transport," 1958. 208 p.
(Ships--Cargo) (MIRA 11:8)

POLEVOY, B.

"Evgenii Simak," *Velikie Stroiki Kommunizma* (Great Constructions of Communism),
Acad. of Pedagogic Scis. of the RSFSR, Moscow, 1951, 383 p.

POLYVOI, V.

May Day (Labor Holiday)

Spring of mankind. Robotnitsa 30, No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

L 07044-67 EWT(1)
ACC NR: AN7001054

SOURCE CODE: UR/9012/66/000/159/0008/0008

AUTHOR: Polovoy, B. (Special correspondent)

Z1

ORG: none

B

TITLE: Polar journey

SOURCE: Pravda, 08Jun66, p. 8, col. 3-6

TOPIC TAGS: sea ice, oceanography, meteorology

ABSTRACT: The report of a Pravda correspondent who visited three drifting stations in the polar basin is cited below. The communication emphasizes human interest aspects, rather than supplying any accurate, detailed or significant information. Part of the journey he was accompanied by Professor A. F. Treshnikov, Director of the Arctic and Antarctic Scientific Research Institute, and Vasiliy Sidorov, chief of the drifting station "SP-13f". A visit was made to the station "SP-15", headed by Vladimir Panov. Emphasis is on the amenities available to the polar workers, their self-sacrificing work, etc. Orig. art. has: 1 figure. [JPRS: 38,230]

SUB CODE: 08, 04 / SUBM DATE: none

Card 1/1 vmb

09240071

POLEVY, Boris

Russia - Public works

With the dream of communism. Ogonek 30 No. 40, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified

POLFVOY, B.P.

Location of the first Russian settlement on the Kolyma River.
Dokl. Inst. geog. Sib. i Dal'. Voat. no. 2266-75 '62.

(MTR 18:10)

POLEVOY, B.P.

I.M. Rubets' forgotten expedition to Kamchatka in the 1660's.
Izv. AN SSSR Ser. geog. no.4:130-135 '64 (MIRA 17:8)

1. Institut geografii Sibiri i Dal'nego Vostoka Sibirskogo
otdeleniya AN SSSR.

POLOVOY, B.P.

Semen Resezov and Vladimir Atlesov; establishing the precise
dates of the early maps of Kamchatka. Izv. AN SSSR. Ser. geog.
no. 6:92-101 N.D. '65.
(MIRA 18:11)

I. Institut geografii Sibiri i Dal'nego Vostoka Sibirskogo
otdeleniya AN SSSR.

POLEVOY, B.P.

The original of S.U.Remezov's "Map book of Siberia" published in 1701.
Dokl. Inst. geog. Sib. i Dal'. Vost. no.7:65-71 '64. (MIRA 18:10)

POLEVOY, B.P.

Main goal of the First Kamchatka Expedition as planned by
Peter I. Vop. geog. Kamch. no. 2:88-94 '64 (MIRA 19:1)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341720015-7

POLEVOY, Boris.

A second fellow traveler. Sov.foto 17 no.2:36-41 F '57.
(Photography) (MLRA 10:7)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341720015-7"

POLEVOY, Boris

On the eve of the Fifth World Congress of Trade Unions. Sov.
profsoiuzy 17 no.23:11 D '61. (MIRA 14:12)
(Trade unions—Congresses)

POLEVY, Boris Nikolayevich

[American diary] Amerikanskie dnevniki. Moskva, Gos.izd-vo
detstvoi literatury, 1957. 318 p. (MIRA 11:1)
(United States--Description and travel)

POLEVOY, Boris Nikolayevich, 1908-

[The Sayan notes; from the diaries of 1963] Sayanskie zapisi;
iz denvnikov 1963 goda. Moskva, Sovetskaia Rossiia, 1964.
131 p.
(MIRA 18:1)

POLKOVY Boris Nikolayevich; SOLITSEVA, V.P., red.; KAKHRAMANOVA, I.M., tekhn.
red.

[Through the wide world; diary of travels] Po belušvetu; dnevnik
puteshestvii. Moskva, Sovetskii pisatel', 1958. 569 p. (MIRA 11:4)
(Voyages and travels)

POLEVOY, Boris Nikolayevich; KROTOVA, I.I., otv.red.; TISHINA, Z.V.,
tekhn.red.

[Thirty thousand li through China] 30000 li po Kitaiu. Moskva,
Gos.izd-vo detskoi lit-ry M-va prosv.RSSR, 1959. 365 p.
(MIRA 13:4)

(China--Description and travel)

CHERNENKO, M.B.; LUKIN, Yu.B.; GUSEV, K.M.; KUDREVATYKH, L.A.; MAKARENKO,
Ya.I.; SATYUKOV, P.A., red.; STEPANOV, V.P., red.; SELYUK, S.I., red.;
SUTOTSKIY, S.B., red.; ABALKIN, N.A., red.; KOZEV, H.A., red.; AVER-
CHENKO, B.Ye., red.; SOBOLEV, L.S., red.; SIMONOV, K.M., red.; POLE-
VOY, B.N., red.; GALIN, B.A., red.

[Heroes of our times] Geroi nashikh dnei. Moskva, Izd. gazety
"Pravda," 1961. 619 p. (MIRA 14:11)
(Labor and laboring classes)

POLEVOY, B.P.

History of the formation of geographical concepts about the north-eastern point of Asia in the 17th century. (Information on the "stone barrier." Origin and the further transformation of a "Necessary nose" legend.) Sib. geog. sbor. no.3:224-270 '64.
(MIRA 18:3)

POLEVOY, B.P.

Waterway from the Arctic to the Pacific Ocean; forgotten instructions
of A.A. Vinius given in 1697. Priroda 54 no.5:94 My '65.
(MIRA 18:5)

1. Institut geografii Sibiri i Dal'nego Vostoka Sibirskogo otdeleniya
AN SSSR, Irkutsk.

POLEVOY, B.P.

Did Ivan Moskvitin reach the Amur mouth? Mat. Otd. ist. geog. znan.
Geog. ob-na SSSR no.1:64-76 '62. (MIRA 17:3)

POLEVOY, B.P.

New biographical data on Vladimir Atlasov; on the 300th anniversary
of his birth. Izv. AN SSSR. Ser. geog. no.5:90-92 S-0 '63.
(MIRA 16:10)

1. Institut geografii Sibiri i Dal'nego Vostoka Sibirskogo
otdeleniya AN SSSR.

POLEVOY, B.P.

On the 1667 "printed" plan of Siberia. Sib. geog. sbor. no.2:
248-257 '63. (MIRA 16:11)

POLEVY, B.P.

N.F. Pogrebov as a librarian and bibliographer. Inform.sbor.
(MIRA 15:7)
VSEGEI no.48:105-112 '61.
(Pogrebov, Nikolai Feodorovich, 1860-1942)
(Librarians)

POLEVOY, B.P.

Find of S.I.Dezhnev's authentic documents about his historical trip
in 1648. Vest.LGU 17 no.6:145-152 '62. (MIRA 15:4)
(Dezhnev, Semen Ivanovich, ca. 1605-1672 or 3)

ALYAVDIN, V.F.; VASIL'YEVA, L.F.; VITOSHINSKAYA, M.I.; GRIGOR'YEVA, L.N.;
GODLEVSKIY, M.N.; ZHEREINA, K.M.; ZHEZEZKOVA, V.N.; KISELEV, N.N.;
KOZYREVA, Yu.A.; KULIKOV, M.V.; PAFFENGOL'TS, K.N.; POLEVAY, B.P.;
SOLOV'YEV, S.P.; STULOV, N.N.; SHAFRANOVSKIY, I.I.

In memory of A.V.Nemilovoi. Zap.Vses.min.ob-va 90 no.6:756-757
'61. (MIRA 15:2)
(Nemilova, Aleksandra Vasil'evna, 1892-1961)

AUTHOR: Polevoy, B.P.

SOV/12-90-6-10/23

TITLE: ~~Forgotten Data of V.D. Poyarkov's Companions on Sakhalin (1644-1645). (Zabyt'ye svedeniya sputnikov V.D. Poyarkova o Sakhaline - 1644-1645)~~

PERIODICAL: Izvestiya vsesoyuznogo geograficheskogo obshchestva, 1958,
Vol 90, Nr 6, pp 547 - 551 (USSR)

ABSTRACT: The author tells of the first data on Sakhalin Island and its inhabitants to reach the Siberian authorities in Yakutsk in 1645. It was a verbal report of the kazak Mikula Timofiyev, a member of V.D. Poyarkov's expedition to the Sea of Okhotsk and the Sakhalin Bay in the winter of 1644-45. V.D. Poyarkov's written report had been lost by M.Timofiyev. The article also contains other early information on Sakhalin from other sources. There are 16 references, 14 of which are Russian, 1 American and 1 Dutch.

Card 1/1

POLEVOY, Boris Petrovich; RYZHKOV, A.N., red.; MEMASHKINA, L.I., tekhn.red.

[The first discoverers of Sakhalin] Pervootkryvateli Sakhalina.
IUzhno-Sakhalinsk, Sakhalinskoe knizhnoe izd-vo, 1959. 119 p.
(MIRA 13:10)

(Sakhalin--Discovery and exploration)

POLEVOY, B.P.

Exact text of Semen Dezhnev's two 1655 reports. Izv. AN SSSR.
Ser. geog. no.2·101-111 Mr-Ap '65. (MIRA 18:4)

1. Institut geografii Sibiri i Dal'nego Vostoka Sibirskogo
ctdeleniya AN SSSR.

POLEVOY, Boris Petrovich

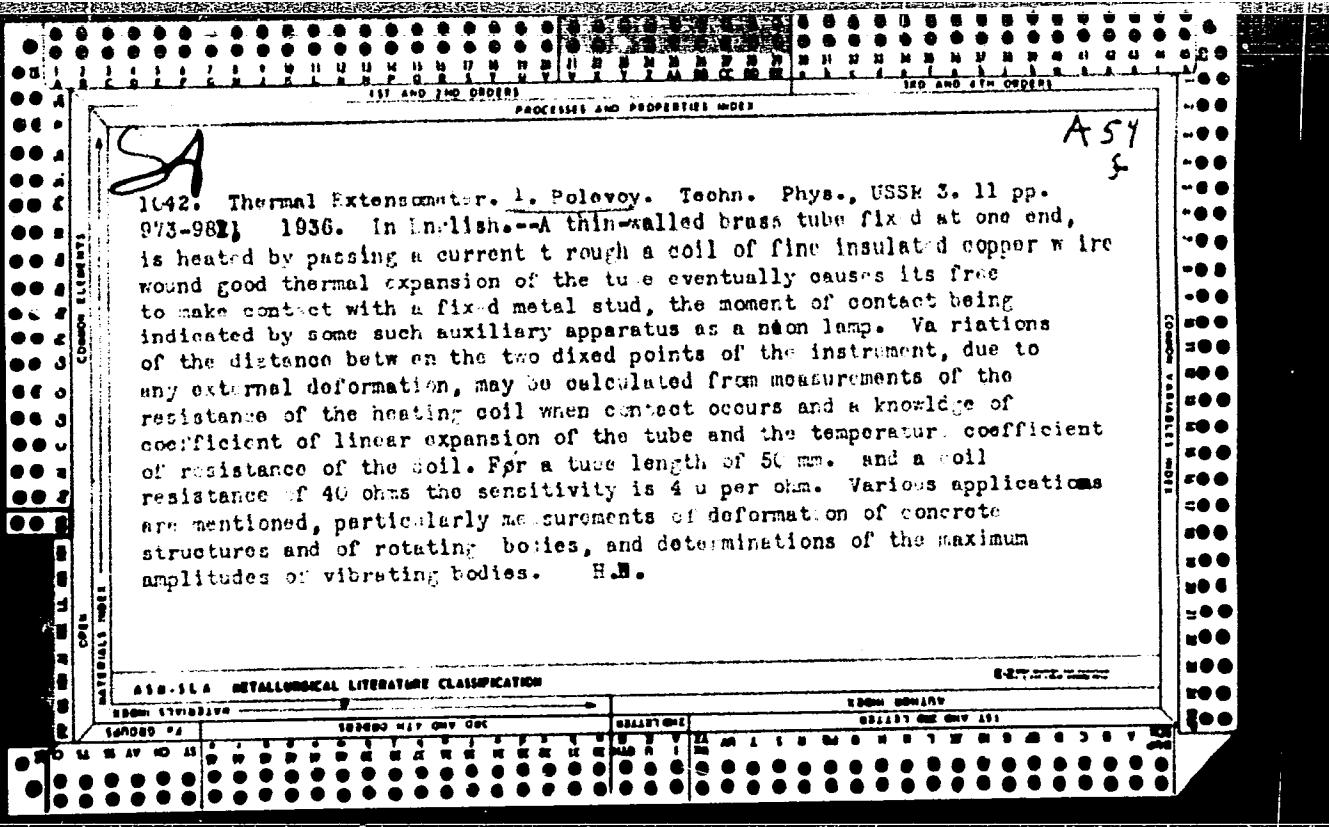
[Grigorii Shelekhov, the Russian Columbus; a biographical sketch] Grigorii Shelikhov, Kolumb russkii; biograficheskii ocherk. Magadan, Magadanskoe knizhnoe izd-vo, 1960. 46 p.
(MIRA 15:3)

(Shelekhov, Grigorii Ivanovich, 1747-1795)

POLKOVNIKOV, G. A.

SOVIET UNION

International Geophysical Year, Izdat. v. Nauk. i tekhn. SSSR
1957. (NIDR 10:8)
(International Geophysical Year, 1957-1958)



POLEVOY, I.

Correct suggestion. Fin. SSSR 23 no.8:66 Ag '62. (MIRA 15:8)
(Factory management)

POLYOV, I.

First one in the U.S.S.R. Mast.ugl. 6 no.5:27-28 My '57. (MLRA 10:7)
(Tula Province--Electric power plants) (Gas turbines)

POLEVY, I.; REZNIKOVA, S.

Simplify the accounting of withholding taxes. Bukhg.uchet 16 no.2:
9-10 P '57. (MLRA 10:2)
(Taxation--Accounting)

POLEVON, L.

"Amateur Radio-Phonograph for 1948," Radio, No.1, 1948;
"What Types of Receivers Are There?" ibid., No. 2, 1948;
"What Do We Need to Know about the Electron?" ibid., No. 3, 1948;
"How the Superheterodyne Operates," ibid., No. 4, 1948;
"Selectivity," ibid., No. 2, 1949;
"The Natural Properties of Sound Reproduction," ibid., No. 3, 1949.

POLEVY, L.

PA 3/49T93

USSR/Radio Receivers
Radio-Phonographs

Jan 48

"Amateur Radio-Phonograph for 1948," L. Polevoy, 5 pp

"Radio" No 1

Describes radio-phonograph constructed so that, by exchanging a few tubes, new improvements in radio can be incorporated into the old machine. Term "radio amateur set" has been applied to the machine as it is adaptable to home repairs. Basic set has seven tubes, and is characterized by high sensitivity.

3/49T93

107-57-2-44/56

AUTHOR: Polevoy, L.

TITLE: Remote Control of a TV Set (Distantionnoye upravleniye televizorom)

PERIODICAL: Radio, 1957, Nr 2, pp 49-50 (USSR)

ABSTRACT: Editor's note mentions K.I. Samoylikov, master and radio designer, who demonstrated his remote-controlled TV set at the 12th All-Union Exhibition of radio amateur designers.

A few circuit diagrams are suggested for remote control of a TV set, including the on-off switch, brightness control, contrast control, volume control, and a switch for automatic cutoff at the end of the program. A circuit diagram for remote brightness control requires one additional variable resistor. A circuit diagram for remote volume control also involves one additional variable resistor. A remote contrast control is combined with the special circuit for changing from the first to the second Moscow TV channel. There are two independent RF channels in the TV set. A potentiometer inserted between the two channels can block either or both of them at will. Two 6Zh1P tubes and a semiconductor diode DG-Tsl are necessary in addition to one 6N15P tube for effecting the remote contrast control. By inserting a suitable relay in the clipper-

Card 1/2

107-57-2-44/56

Remote Control of a TV Set

limiter circuit of the sync system (with one additional tube), the TV set can be made to switch itself off at the end of the program. A simple circuit using a FS-K1 or FS-K2 photoresistor is also suggested for automatic contrast control that would depend on the amount of illumination in the room where the TV set is installed. Circuit diagrams, with explanations of their functioning, and parts data are supplied.

There are 5 figures in the article.

AVAILABLE: Library of Congress

Card 2/2

POLEVOY, L.A.

Efficient handling of slops in the Michurinsk distilling plant.
Spirt.prom. 20 no.2:23-24 '54. (MLRA 7:6)
(Michurinsk--Liquor industry--By-products)
(Liquor industry--By-products--Michurinsk)

KUDRIN, A.N.; POLEVOY, L.G.

Induction of aggressive condition in mice. Farm. i toks. 27 no.1:
95-99 Ja-F '64. (MIRA 17:11)

1. Kafedra farmakologii (zav. - prof. A.N. Kudrin) farmatsevticheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

POLLEVOK, L. A.

4
Filling a battery of fermentation vats with wort in a continuous fermentation process. V. I. Yarovenko, P. V. Seregin, L. A. Polevoy, and N. P. Shukina. U.S.S.R. 108,487, Aug. 25, 1937. Added to U.S.S.R. 95,006. The fermenting liquid moves from vat to vat because of an excess pressure maintained at the head vat. CO_2 derived from the preceding vat is fed to the head vat at a point below the level of the tube through which the fermenting liquid flows. M. Hospital

POLEVY, L.A.

Semicontinuous fermentation of starchy mashes. Spirt. prom.
24 no. 8:11-14 '58. (MIRA 11:12)
(Michurinsk--Fermentation)

POLEVOY, L.A.

Michurinsk Experimental Alcohol Plant. Spirit.prom. 25 no.1:14
'59. (MIRA 12:2)
(Michurinsk--Distilling industries)

POLEVOY, L.A.

Continuous two-flow fermentation in the production of
alcohol from starchy raw materials. Spirt.prom. 26
no.5:11-15 '60. (MIRA 13:7)
(Fermentation) (Alcohol)

POLEVOY, L.A.

Michurinsk Experimental Alcohol Plant at the eve of the 22d
Congress of the CPSU. Spirt.prom. 27 no.4:6-7 '61.
(MIRA 14:6)
(Michurinsk—Alcohol)

KUDRIN, A.N.; POLEVOY, L.G.; GRANDBERG, I.I.; KOST, A.N.

Search for new tranquilizers in the aminopyrazole series. Farm.
i toks. 27 no.3:295-300 My-Je '64. (MIRA 18:4)

1. Kafedra farmakologii (zav. - prof. A.N.Kudrin) farmatsevticheskogo
fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta
imeni N. Ch'chenova i laboratoriya spetsial'nogo organicheskogo sinteza
(zav. - ch'len-korrespondent AN SSSR prof. A.P.Terent'yev) Moskov-
skogo gosudarstvennogo universitete.

POLEVOY, L.L.

Archaeological information about the vegetation and mammals in
the Prut-Dniester interfluve. Okhr. prir. Mold. no.2:99-104
'61. (MIRA 15:8)
(Moldavia—Mammals, Fossil) (Moldavia—Paleobotany)

22 (5)

SOV/91-59-4-22/28

AUTHOR: Polevoy, M. I., Engineer

TITLE: A Public Show of Safety Engineering, Work Protection and Factory Hygiene (Obshchestvennyy smotr tekhniki bezopasnosti, okhrany truda i proizvodstvennoy sanitarii)

PERIODICAL: Energetik, 1959, Nr 4, p 36 (USSR)

ABSTRACT: A public show of safety engineering, work protection and factory hygiene was conducted at the Tsentral'nyy remontno-mekhanicheskiy zavod Mosenergo (Central Mechanical Repair Plant of Mosenergo) from February 20, 1958 to October 1, 1958. The campaign for this show was organized by the trade union, to induce employees to make suggestions to improve work safety. The plant's personnel submitted 1064 suggestions, 960 of which were accepted. Of these, 798 had been implemented by Oct 58.

Card 1/1

MALTYZOV, V., rabochiy; MONAKHOV, A., rabochiy; POLYAKOV, I., rabochiy;
LITVINOV, I., pensioner; POLEVOY, N., pensioner; REVICHCHIN, P.,
pensioner; ROZHKOV, I.

Readers' letters. Gor.khoz. Mosk. 34 no.12:31 D '60.
(MIRA 13:12)

I. Nachal'nik Otdela domovogo khozyaystva Moszhilupravleniya.
(Moscow--Playgrounds)

Polevoy

AID P - 4345

Subject : USSR/Radio

Card 1/1 Pub. 89 - 5/15

Authors : Rybkin, V. and O. Polevoy

Title : A 420 megacycles transmitter

Periodical : Radio, 2, 25-27, F 1956

Abstract : The article describes the design of a transmitter operating at 420 to 425 megacycles. The structural parts and their mounting are explained. It is expected the the transmitter will be used by radio amateurs who can build it themselves. Nine diagrams.

Institution : None

Submitted : No date

POPOV, N.I.; PATIN, S.A.; POLEVOY, R.I.; KONNOV, V.A.

Strontium 90 in the waters of the Pacific Ocean. Report No. 2:
Surface waters of the central area, 1961. Okeanologiya 4 no.6:
1026-1029 '64. (MIRA 18:2)

1. Institut okeanologii AN SSSR.

POLEVY, R. M.

4001-2ml

197
SMALL SIZE BETA SPECTROMETER. S. A. Berezov and
R. M. Polevoy. Zhur. Tekh. Fiz. 23, 2535-6(1956) Dec.
(In Russian)

A description is given of a small size beta spectrometer with a uniform field, focusing a first order electron beam in a direction perpendicular to the field. The spectrometer was used to identify radioactive isotopes from beta spectra. The electron and positron spectra up to 5 Mev were taken simultaneously on the spectrometer. The principle of construction is simple and the results are accurate. The weight of the magnet and chamber is 75 kg. The magnetic coils are supplied from 18 v. batteries with 15 amp. maximum. (R.V.J.)

2
ENCL D

89-5-11/22

AUTHOR: POLEVOY, R.M., SERIKOV, I.N.

TITLE: Seventh Annual Conference on Nuclear Spectroscopy.
(Sed'moye yezhegodnoye soveshchaniye po yadernoy
spektroskopii, Russian)

PERIODICAL: Atomnaya Energiya, 1957, Vol 2, Nr 5, pp 471-473 (U.S.S.R.)

ABSTRACT: The conference was concerned with questions of nuclear theory, the non-maintenance of parity, decay schemata of nuclei, γ -nuclear radiation, vacuum polarization in mesic atoms, new apparatus for α -, β -, and γ -spectroscopy etc. The discourses held during the conference are to be published at some future date in "Izvestiya AN SSSR, seriya fizicheskaya".

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 1/1

Polevoy, R.M.

120-3-3/40

AUTHORS: Baranov, S.A. and Polevoy, R.M.

TITLE: A Method of Absolute Counting of Charged Particles (Metod Absolyutnogo scheta zaryazhennykh chastits)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, Nr 3, pp.52-56
(USSR)

ABSTRACT: Absolute measurements of β -activity with standard and end-window counters of type T-20 lead to various difficulties. These are: self absorption of the electrons by the source, absorption in the window of the end-window counter and in the air, back scattering of β particles from the support on which the source is deposited, and scattering in the source itself. In addition, it is necessary to know the decay scheme of the isotope under investigation and to correct for the solid angle. The calculation of the corrections for these effects is complex and can lead to large errors. It is therefore desirable to calibrate the counters using sources whose absolute activity was determined with 4π -counters. A measurement on a given specimen using both an end-window counter and a 4π -counter yields the correction factor K via the simple formula $K = N_0/N_1$, where N_0 and N_1 are the number of β particles recorded

Card 1/3

200-5-1/4C

A Method of Absolute Counting of Charged Particles.

by the 4π -counter and the end-window counter respectively. For different radioactive isotopes the value of K must be determined separately. However, such a calibration is correct only for "weightless" specimens. In practice one has to determine the absolute activity of specimens having an appreciable weight. It follows that K depends not only on the limiting energy of the β spectrum of the given isotope but also on the form, position and weight of the source. The dependence of K on the weight of the specimen is shown in Fig.1 for Y^{90} and Sr^{90} in the range 0 to 45 mg. Investigations of this type are carried out using a calibrating 4π -counter shown in Fig.2. The counter consists of a hollow steel cylinder 40 mm in diameter and 40 mm high. The ends of it are covered by flat circular discs. At a distance of $0.25 h$ (where h is the height of the cylinder) from the end pieces two parallel tungsten threads, 20 microns in diameter, are placed along the diameter of the tube. The threads are insulated from the steel tube. The tube is cut into two halves perpendicular to its axis and a holder containing the radioactive

Card 2/3

120-3-5/40

A Method of Absolute Counting of Charged Particles.

source is placed between them. A thin organic film is stretched over an aperture in the holder and the specimen is deposited on this film. The steel tube and the holder act as the cathode and the two threads as the anode. The working gas is methane at a pressure of 750 mmHg. 4 γ -counters can be used in the Geiger, proportional and limited proportionality regions. A correction for the effect of the thickness of the source and the thin film is calculated, and is shown to be small. The counter can be used for absolute measurements on α -particles, β -particles and decay fragments. The efficiency is very nearly 100%. Using this counter it is possible to study β -active specimens with activities between 6×10^5 disintegrations per/min and 15 disintegrations per/min., the background being about 35 pulses per/min. The lower limit can be lowered by minimising the effect of cosmic radiation using coincidence schemes. There are 4 diagrams, no tables and 12 references, of which 1 is Russian, 9 English, 1 French and 1 German.

SUBMITTED: September 22, 1956.

AVAILABLE: Library of Congress.

Card 3/3 1. Counters-Measurement 2. Particles-Counting 3. Isotope-Decay
 4. Counters-Operation

POLEVOY, R.M.

AUTHOR: BARANOV,S.A., POLEVOY, R.M., RODIONOV, Yu.F. 89-9-13/32
SHISHKIN,G.V.

TITLE: Nuclear Energy Levels of Tu¹⁶⁹. (Energeticheskiye urovni yadra Tu¹⁶⁹)

PERIODICAL: Atomnaya Energiya, 1957, Vol 3, Nr 9, pp 256-257 (U.S.S.R.)

ABSTRACT: By means of a double-focusing β -spectrometer, a scintillation spectrometer, and a proportional aiming tube the γ -radiation of the nucleus Yb¹⁶⁹ was measured and a random scheme was set up. The following γ -energy with the corresponding multipole order was found:

| | |
|-------------------------|----------------------------|
| 8,42 {M1 + E2} | 130,48 (E2) |
| 20,74 {M1} | 156 ? |
| 63,13 {E1} | 177,21 {0,75 M1 + 0,25 E2} |
| 93,62 {0,9 M1 + 0,1 E2} | 197,97 {M1} |
| 109,67 {M1} | 240,6 {E1 ?} |
| 118,20 {E2} | 260,8 {E1 ?} |
| | 307,7 (E2) |

The above can be arranged in form of a scheme with the following level values (spin and parity in brackets):

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POLEVY, R.M.

PAGE I BOOK EXPLOITATION

SOV/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po priemenuyu po radioaktivnym i stabilnym izotopov i islucham po narodnoi khimii i naute. Moscow, 1957

Polevnye izotopy. Radiochernye gamma-izotopika. Radiometriya i dosimetriya, trudy konferentsii (Isotope Production, Radioactivity and Dosimetry, Proceedings of the All-Union Conference on the Use of Berry, Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR; Glavnoye upravleniye po ispol'sovaniyu atomnoy energii SSSR.

Editorial Board: Prolov, Yu.S. (Rep'd. Ed.), Zhavoronkov, N.N. (Deputy Rep'd. Ed.), Aglintsev, K.K., Alekseyev, B.A., Bochkarev, V.V., Lashchinskii, M.I., Mal'kov, T.P., Sinit'syn, V.I., and Popova, O.I. (Secretary); Tech. Ed.: Novitskii, N.D.

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and other concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

Prolov, Yu.S., V.V. Bochkarev, and Ye.Ye. Kulish. Development of Isotope Production in the Soviet Union. 5
This report is a general survey of production methods, apparatus, raw materials, applications, investigations, and future prospects for radio isotopes in the Soviet Union.

Card 2/12

- | | |
|---|-----|
| Lantsov, M.P., V.Ye. Manoylov, and O.A. Myardikov. A Photocolorimetric Method of Beta-Dosimetry | 246 |
| Baranov, S.A. and R.M. Polevoy. A Counter for [Determining] the Absolute [ACTIVITY] of Charged Particles | 251 |
| Lantsov, M.P., V.Ye. Manoylov, and O.A. Myardikov. A Galvanic Method of Measuring Beta-Activity | 254 |
| Kogan, R.M., and N.K. Peretyanova. The Use of a Photofilm-Sцинillating Crystal System for Registering Gamma-Radiation | 260 |
| Kalugin, K.S. and V.V. Markelov. On the Problem of Measuring Weak Currents | 264 |

Card 11/12

85463

S/089/60/009/002/018/019/XX
B006/B059

26.2246

Polevoy, R. M.

AUTHOR:

TITLE:

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 140 - 142

TEXT: The correction to beta-particle absorption in the backing of a 4π Counter
source is the chief correction influencing accuracy in the backing of the
text of unweighable samples by means of 4π counters. It was the aim of
the author to derive an expression for these corrections. It was the aim of
valid for complex spectra and takes conversion and Auger electrons into
account. The present "Letter to the Editor" is a short account on the
above task. The symbols used are:
 n - number of electrons emitted in one decay event, including conversion
 p_1^- electron absorption;
 p_1^- spectrum and solid angle;
 p_2^- coefficient of electron reflection from the backing, averaged over
 p_2^- spectrum and solid angle;

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S/089/60/009/002/018/019/XX
B006/B059

Corrections for Absorption in the Backing of a 4π Counter

N_o - number of beta decays in the source per unit time;
 N_n - number of impulses per unit time in that half of the counter which is separated from the source by the backing;
 N_v - number of impulses per unit time in the other half of the counter;
 N_p - counting rate when both halves of the counter are connected in parallel.

The following equalities hold: $N_p = N_o \left[1 - (p_1/2)^n \right]$; $N_v = N_o \left[1 - \frac{1}{2^n} + \frac{1 - (1-p_2)^n}{2^n} \right]$; $N_n = N_o \left[1 - \frac{1}{2^n} - \frac{p(1-p^n/2^n)}{2(1-p/2)} \right]$, where $p = p_1 + p_2$. First approximation with respect to p and p_2 yields: $N_v = N_o (1 - \alpha + n \alpha p_2)$; follows that $p_1 = \frac{2B(1-\alpha)}{(A-1)(2Bn\alpha-2n\alpha-1)-1}$, where $B = (N_v - N_n)/N_v$ and $A = (p_1 + p_2)/p_1$. Since A depends but slightly on the limiting energy E_o of the beta spectrum and on the thickness Δ of the backing, the accuracy of

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Corrections for Absorption in the Backing
of a 4π Counter

S/089/60/009/002/018/019/xx
B006/B059

p_1 is fairly good even if Δ is only approximated. There are 1 figure and
2 non-Soviet references.

SUBMITTED: January 14, 1960

Card 3/3

L 39484-65 EWT(1) IJP(c)

ACCESSION NR: AP5004954

S/0286/65/000/002/0056/0057

AUTHORS: Baranov, S. A.; Malov, A. F.; Polevoy, R. M.; Shchepkin, G. Ya.

TITLE: Magnetic charged particle spectrometer. Class 42, No. 167649

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 2, 1965, 56-57

TOPIC TAGS: spectrometer, particle spectroscopy

ABSTRACT: This Author Certificate presents a magnetic charged particle spectrometer with double focusing of the beam in a transverse axially symmetric magnetic field. The spectrometer contains a source and a detector of charged particles located in a vacuum chamber which is placed between the magnet poles. To increase the radiant emittance and dispersion of the device, the beam focusing is accomplished in an angle greater than 360° (see Fig. 1 on the Enclosure). To eliminate the incidence at the particle detector of "background" particles in the first loop of the beam trajectory, a system of diaphragms is placed in the vacuum chamber. Orig. art. has: 1 diagram.

ASSOCIATION: Institut atomnoy energii im. I. V. Kurchatova (Atomic Energy Institute)

SUBMITTED: 25Dec63

ENCL: 01

SUB CODE: NP

NO REF SOV: 000

OTHER: 000

Card 1/2

S/048/60/024/03/02/019
B006/B014

AUTHORS: Baranov, S. A., Polevoy, R. M., Rodionov, Yu. F., Shishkin,
G. V., Shubko, V. M.

TITLE: Investigation of the Radioactive Decay of Th^{231}

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 3, pp. 261-271

TEXT: The article under review was read at the Ninth All-Union Conference on Nuclear Spectroscopy (Khar'kov, January 26 - February 2, 1959). Th^{231} is a well-known β -emitter with a half-life of 25.6 hours; numerous investigations of the level scheme have already been conducted. The authors were stimulated to further investigations by the fact that a level scheme deviating from Ref. 5 had been published in Ref. 4. The sample was obtained by bombarding Th^{230} with slow neutrons in the RFT reactor. The subsequent chemical treatment of the sample is described in the introduction. Numerous details concerning measurements of the electron spectrum are reproduced in the 2nd section. Fig. 1 shows the most

VB

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Investigation of the Radioactive Decay of
Th²³¹

S/048/60/024/C2/C2/C10
B006/B014

interesting part of the electron spectrum in the region of from 150 to 1,100 gauss.cm. γ -Spectrometric measurements are described in the 3rd section. Fig. 2 shows the spectrum of X-ray and soft γ -radiation of Pa²³¹ taken by means of proportional counters that were filled with heavy gases. Measurements showed among other things that the most intense γ -rays with 25.6 and 84.1 kev do not occur in a cascade, that the 26-kev quanta coincide with the 58-, 95-, 145-, 163-, and 218-kev quanta, but not the 250-kev quanta with the more intense 26- and 84-kev quanta. The 4th section deals with the determination of the multipolarities of certain γ -transitions, and the 5th section with details of the Pa²³¹ level scheme. The bulky numerical material yielded by the investigations is clearly compiled in tables. Table 1, which extends over 3.5 pages, offers an interpretation of the electron lines occurring in the

Th²³¹ β^- , Pa²³¹ decay, Table 2 supplies data of the energy of γ -transitions of the Pa²³¹ nucleus, and Table 3 provides the absolute and relative conversion coefficients for the γ -rays of Pa²³¹. Fig. 3 shows the level scheme as it proceeds from result of measurements. This scheme agrees with that obtained by Nilsson from at least the qualitative side, *VB*

Card 2/3

S/120/61/000/001/026/062
E032/E114

AUTHORS: Polevoy, R.M., and Pchelin, V.A.

TITLE: Measurement of β -Active Specimens Having an Activity
 $of 5 \times 10^{-13}$ curies

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No. 1, pp.82-85

TEXT: A small 4π -counter is described, having a natural background (inside an anticoincidence screen) of 1 pulse per min. The counter is illustrated schematically in Fig.1. The counter consists of two parts with the plane specimen between them. Each part consists of an open-ended counter working in the limited proportionality region. The cathode is in the form of a steel cylinder 20 mm in diameter and 17 mm long and an aluminium foil covering the source. The anode is in the form of a loop made of tungsten wire 30μ in diameter. The diameter of the loop is 6 mm. The loop is held in position by a teflon holder and the minimum distance from the loop to the cylinder walls and the foil is the same (7 mm). The working gas is commercial methane containing not more than 5% impurities. The pulses from the counter are amplified and shaped by the УПИ-1 (UPI-1) amplifier (S.A. Baranov and Card 1/4

S/120/61/000/001/026/062
EO32/E114

Measurement of β -Active Specimens Having an Activity of 5×10^{-13} curies

R.M. Polevoy, Ref.7) and the pulses from the amplifier output are applied to an anticoincidence circuit. The counting characteristic obtained with this amplifier and a methane consumption of about $20 \text{ cm}^3/\text{min}$ is shown in Fig.2. As can be seen from this figure, the length of the plateau is not less than 200 V and the value of α found from the form of the characteristic was 0.0115 V^{-1} (α is defined by:)

$$K_f = Ae^{\alpha V} \quad (1)$$

where K_f is the gas amplification coefficient and V is the voltage across the counter. The counter was placed inside a cylindrical lead screen having a wall thickness of 50 mm. -6 (MS-6) counters were placed inside the lead screen and were used as the anticoincidence cover. Perspex screens 10 mm thick absorb electrons ejected by γ -rays from brass and β -particles from radioactive contaminations in brass. The counting efficiency was measured as a function of the weight of the specimen for the

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S/120/61/000/001/026/062
E032/E114

Measurement of β -Active Specimens Having an Activity of 5×10^{-13} curies

following isotopes: Y⁹⁰, Ag¹¹¹ and Cd¹¹⁵ + In^{115m} (introduced into a non-active carrier). The sources were deposited on thin films of PVC. It was found that the counter could be used to measure specimens having activities of the order of $0.5 \mu\text{C}$ "to an accuracy of $3\% + \delta$ where δ is the statistical error of a given measurement". A theory is developed whereby the experimentally determined efficiency is corrected for the slope of the plateau. There are 4 figures and 10 references: 1 Soviet and 9 non-Soviet.

SUBMITTED: January 11, 1960

Card 3/4

S/120/61/000/001/026/062
E032/E114

curies

Measurement of β -Active Specimens Having an Activity of 5×10^{-13} /

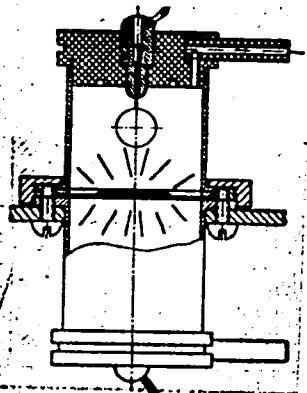


Fig. 1

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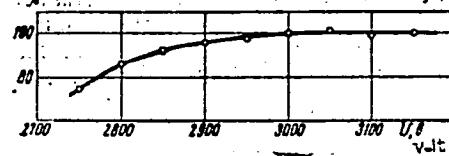


Fig. 2

29595
S/120/61/000/004/004/034
E032/E514

21.6000

AUTHOR: Polevoy, R.M.

TITLE: Calculation of the efficiency of a cylindrical scintillator in the case of widely diverging gamma-ray beams

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No.4, pp.47-48

TEXT: The total efficiency η of a scintillator for γ -rays from a point source is given by

$$\eta = \frac{1}{4\pi} \int_{\Omega} \left\{ 1 - \exp \left[-\ell(\vartheta, \varphi) \tau(E) \right] \right\} d\Omega ,$$

where $\tau(E)$ is a known function of energy, ℓ is the thickness of the detector in the given direction and Ω is the solid angle subtended by the detector. As a rule, this integral cannot be easily evaluated, and hence numerical integration becomes necessary for each value of E . When the point source lies on the axis of the crystal (Fig. 1) the efficiency is given by

$$\eta(E) = \frac{1}{2} \int_0^{\pi/2} \max \left\{ 1 - \exp \left[-\tau(E) \ell(\vartheta) \right] \right\} \sin \vartheta d\vartheta$$

Card 1/4

Calculation of the efficiency of ...

29595

S/120/61/000/004/004/034
E032/E514

where $0 \leq \vartheta \leq \vartheta_0$, $l(\vartheta) = h/\cos \vartheta$. When this integral is replaced by

$$\int_0^{\vartheta_0} \left\{ 1 - \exp \left[- \tau h \left(1 + \frac{\vartheta}{2} \right)^2 \right] \right\} \vartheta d\vartheta$$

the relative error introduced thereby in the function enclosed in the braces {} is less than $\vartheta_0^4/24$. The relative error introduced by the replacement of $\sin \vartheta$ by ϑ is $\vartheta_0^2/12$. Assuming that the expression in the braces is a slow function of ϑ , we have

$$\eta = \frac{1}{2} \left(1 - \frac{\vartheta_0^2}{12} \right) \left\{ \frac{\vartheta_0^2}{2} + \frac{\exp(-\tau h)}{2\tau h} \times \left[\exp \left(- \frac{\tau h \vartheta_0^2}{2} \right) - 1 \right] \right\}$$

This is accurate to 1% for $\vartheta_0 \leq 40^\circ$. It is shown that the general formula for the efficiency of a cylindrical phosphor is

$$\eta = \frac{1}{2} \left\{ \beta \frac{\vartheta_0^2}{2} + \cos \vartheta_0 - \cos \vartheta_{\max} + \beta \frac{e^{-\tau h}}{\tau h} \left[\exp(-\alpha \tau) - 1 \right] \right\}$$

Card 2/4

Calculation of the efficiency of ...

29595

S/120/61/000/004/004/034
E032/E514.

$$\begin{aligned} & - \frac{\exp(-\tau b \vartheta_{\max})}{\tau_b^2 + 1} \times \left[\exp(\tau b \vartheta_{\max})(\tau b \sin \vartheta_{\max} - \cos \vartheta_{\max}) - \right. \\ & \quad \left. - \exp(\tau b \vartheta_0)(\tau b \sin \vartheta_0 - \cos \vartheta_0) \right] \}, \end{aligned}$$

where

$$\beta = 1 - \vartheta_0^2/12; a = \frac{1}{2} h \vartheta_0^2;$$

$$b = h/\cos \vartheta_0 (\vartheta_{\max} - \vartheta_0).$$

This formula holds to within 5% provided

$$R/x \leq 2.5; 0.55 \leq R/(h+x) \leq 0.84.$$

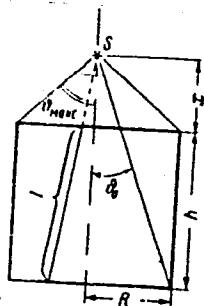
There are 2 figures and 2 references, both non-Soviet, the English-language reference reads as follows: Ref.2: P.R.Bell, Beta- and Gamma-Ray Spectroscopy, ed. by K. Siegbahn, Amsterdam, 1955.
Card 3/4

Calculation of the efficiency of ...

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S/120/61/000/004/004/034
E032/E514

SUBMITTED: January 13, 1960 (initially)
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Fig.1

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BARANOV, S.A.; POLEVOY, R.M.; RODIONOV, Yu.F.; SHISHKIN, G.V.;
SHUBKO, V.M.

[Radioactive decay of Th²³¹] Izuchenie radioaktivnogo ras-
pada Th²³¹. Moskva, In-t atomnoi energii AN SSSR, 1960. 22 p.
(MIRA 17:1)

L 47076-66 EWT(l)/EWT(m) GW
ACC NR: AT6028953 (N) SOURCE CODE: UR/2566/66/082/000/0005/0015

AUTHOR: Popov, N. I., Patin, S. A., Polevoy, R. M., Konnov, V. A.

ORG: none

19

36
371

TITLE: Strontium-90 in the Pacific Ocean

SOURCE: AN SSSR. Institut okeanologii. Trudy, v. 82, 1966.
Issledovaniya radioaktivnoy zaryaznennosti vod mirovogo okeana
(Investigations of radioactive contamination of waters of the oceans),
5-15

TOPIC TAGS: strontium , radioactive contamination, ocean radioactivity, ocean property, oceanographic ship /Vityaz oceanographic ship

ABSTRACT: The article deals with the results of determinations of Sr⁹⁰ concentration in the deep waters of the central Pacific at the end of 1961 during the 34th cruise of the Vityaz.¹⁹ The vertical distribution of Sr⁹⁰ was determined along 162° E long, and 176, 154, and 140° W long from 18° S lat to 15° N lat. The levels at which samples were taken includes practically the entire water spectrum of the ocean from the surface to the bottom. Common regularities in the vertical distribution of Sr⁹⁰ in the Pacific Ocean were determined, and the t

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